

WHAT IS CLAIMED IS:

1. A method of installing transformer winding coils, comprising the steps of:

providing a transformer including a magnetic core assembly, a winding frame, a primary winding coil, a secondary winding coil, and an enclosure, wherein the primary winding coil and the secondary winding coil are respectively wound around the winding frame;

wrapping the portions of the winding coils wound around the winding frame with a tape and leading out a plurality of winding outlets from the winding frame;

positioning the magnetic core assembly and the winding frame fixedly within the enclosure; and

directly securing the plurality of winding outlets to a printed circuit board in order to electrically connect the transformer and the printed circuit board.

2. The method of installing transformer winding coils according to claim 1 wherein after the step of wrapping the portions of the winding coils wound around the winding frame with a tape and leading out a plurality of winding outlets is performed, the method further comprises a step of folding the plurality of winding outlets and wrapping the plurality of winding outlets with another tape.

3. The method of installing transformer winding coils according to claim 1 wherein the primary winding coil and the secondary winding coil are formed from copper wires.

4. The method of installing transformer winding coils according to claim 1 wherein before the step of securing the plurality of winding outlets to the printed circuit board is performed, the method further comprises a step of wrapping the plurality of winding outlets with a plurality of insulating films.

5. The method of installing transformer winding coils according to claim 4 wherein the plurality of insulating films are produced from polyethylene.

6. The method of installing transformer winding coils according to claim 1 wherein the step of directly securing the plurality of winding outlets to the printed circuit board includes steps of penetrating the plurality of winding outlets through corresponding through holes on the printed circuit board, and the portions of the plurality of winding outlets that have been penetrated the corresponding through holes are flattened by extrusion and then processed by tin furnace, and thereby directly secure to the printed circuit board.

7. A transformer structure comprising:

a winding frame;
a primary winding coil and a secondary winding coil respectively wound around the winding frame;
a magnetic core assembly interacting with the primary winding coil and the secondary winding coil wound around the winding frame in order to accomplish voltage regulation; and
an enclosure that fixedly positions the magnetic core assembly and the winding frame therein;
wherein the winding frame leads out a plurality of winding outlets of the primary winding coil and the secondary winding coil and electrically secures the plurality of winding outlets to a printed circuit board directly.

8. The transformer structure according to claim 7 wherein the magnetic core assembly is shaped as an EI-type core or an EE-type core.

9. The transformer structure according to claim 7 wherein the enclosure includes a bottom plate assembly and a seal plate, and when the bottom plate assembly and the seal plate are assembled, the magnetic core assembly and the winding frame are fixed positioned within an inner space enclosed by the bottom plate assembly and the seal plate.

10. The transformer structure according to claim 7 further comprising at least one insulating film to be coated on the

plurality of winging outlets for providing an electrical insulation to the plurality of winding outlets.

11. The transformer structure according to claim 7 wherein the primary winding coil and the secondary winding coil are formed from copper wires.